



CLAIMS

1. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising the steps of:
generating a command via a first computer at a first location;
transmitting the command to a second computer at a second location over a remote data link;
sending the command from the second computer to a digital signal processor in one of a telephone and the hearing aid;
outputting a test tone from the digital signal processor based on the output command to a user of the telephone wearing the hearing aid;
receiving a user response to the test tone over the remote data link; and
adjusting the hearing aid based on the user response to the test tone, wherein:
said adjusting step comprises the steps of:
transmitting the user response to the first computer over the remote data link;
retrieving a stored audiogram from memory based on the accuracy of the
response; and
uploading the audiogram into the hearing aid of the user over the remote data
link; and
said audiogram is a compensation curve for adjusting performance characteristics of the
hearing aid based on the user response.

a! 2. (original) The method of claim 1, wherein said command is a DTMF tone.

3. (original) The method of claim 1, wherein said receiving step comprises inputting a response to the outputted command into the second computer via a keyboard attached to the computer.

4. (original) The method of claim 1, wherein said receiving step comprises inputting a response to the command via a key pad on the telephone.

5-6. (canceled)

7. (currently amended) The method of claim 1, wherein said adjusting step further comprises ~~the steps of:~~

~~transmitting the user response to the first computer over the remote data link;~~
~~determining an accuracy of the user response[[:]]~~
~~retrieving a stored audiogram from memory based on the accuracy of the response; and~~
~~uploading the stored audiogram into the hearing aid of the user over the remote data link.~~

8. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps of:

generating a command via a computer;
sending the command to a digital signal processor in one of a telephone and the hearing aid;
outputting a test tone from the digital signal processor based on the command to the user of the telephone wearing the hearing aid;
receiving a response to the test tone by the user; [[and]]
storing the response to the test tone by the user in the computer;
retrieving a stored audiogram from memory based on the accuracy of the stored response; and
uploading the audiogram into the hearing aid of the user.

9. (original) The method of claim 8, wherein said command is a DTMF tone.

1 10. (original) The method of claim 8, wherein said receiving step comprises inputting a
2 response to the output command into the computer via a keyboard attached to the computer.

1 11. (original) The method of claim 8, wherein said receiving step comprises inputting a
2 response to the command via a keypad on the telephone.

1 12. (canceled)

1 13. (currently amended) The method of claim [[12]] 8, wherein said audiogram is a
2 compensation curve for adjusting performance characteristics of the hearing aid based on the user
3 response.

1 14. (original) The method of claim 8, wherein the command is generated by a first computer
2 at a first location and is received by a second computer at a second location, and said second computer
3 sends the command to the digital processor.

1 15. (original) The method of claim 14, wherein the response is stored in the first computer.

1 16. (original) The method of claim 14, wherein the response is stored in the second
2 computer.

1 17. (original) The method of claim 14, wherein the response is stored in the first and second
2 computers.

1 18. (original) The method of claim 8, wherein the digital signal processor is located in the
2 hearing aid and step of sending the command to the digital signal processor is by a wireless link.

1 19. (new) A method for remotely adjusting a hearing aid of a user, comprising the steps of:
2 generating a command via a first computer at a first location;
3 transmitting the command to a second computer at a second location over a remote data link;
4 sending the command from the second computer to a digital signal processor in one of a
5 telephone and the hearing aid;
6 outputting a test tone from the digital signal processor based on the output command to a user of
7 the telephone wearing the hearing aid;
8 receiving a user response to the test tone over the remote data link; and
9 adjusting the hearing aid based on the user response to the test tone, wherein said receiving step
10 comprises inputting a response to the outputted command into the second computer via a keyboard
11 attached to the computer.

1 20. (new) A method for remotely adjusting a hearing aid of a user, comprising the steps of:
2 generating a command via a first computer at a first location;
3 transmitting the command to a second computer at a second location over a remote data link;
4 sending the command from the second computer to a digital signal processor in one of a
5 telephone and the hearing aid;
6 outputting a test tone from the digital signal processor based on the output command to a user of
7 the telephone wearing the hearing aid;
8 receiving a user response to the test tone over the remote data link; and
9 adjusting the hearing aid based on the user response to the test tone, wherein said adjusting step
10 comprises the steps of:
11 transmitting the user response to the first computer over the remote data link;

12 determining an accuracy of the user response;
13 retrieving a stored audiogram from memory based on the accuracy of the response; and
14 uploading the stored audiogram into the hearing aid of the user over the remote data link.

1 21. (new) A method for adjusting a hearing aid of a user, comprising the steps of:
2 generating a command via a computer;
3 sending the command to a digital signal processor in one of a telephone and the hearing aid;
4 outputting a test tone from the digital signal processor based on the command to the user of the
5 telephone wearing the hearing aid;
6 receiving a response to the test tone by the user; and
7 storing the response to the test tone by the user in the computer, wherein said receiving step
8 comprises inputting a response to the output command into the computer via a keyboard attached to the
9 computer.

1 22. (new) A method for adjusting a hearing aid of a user, comprising the steps of:
2 generating a command via a computer;
3 sending the command to a digital signal processor in one of a telephone and the hearing aid;
4 outputting a test tone from the digital signal processor based on the command to the user of the
5 telephone wearing the hearing aid;
6 receiving a response to the test tone by the user; and
7 storing the response to the test tone by the user in the computer, wherein the command is
8 generated by a first computer at a first location and is received by a second computer at a second
9 location, and said second computer sends the command to the digital processor.

1 23. (new) A method for adjusting operations of a hearing aid of a user, wherein:
2 a computer system transmits a sequence of one or more non-audible commands to a processor in
3 one of a telephone and the hearing aid;
4 the processor causes an audible test tone to be generated in response to receipt of each command,
5 wherein:
6 when the processor is in the telephone, the telephone generates each test tone; and
7 when the processor is in the hearing aid, the hearing aid generates each test tone;
8 the computer system receives a response to each of one or more of the test tones from the user;
9 the computer system processes the one or more responses from the user to generate parameters
10 for controlling the operations of the hearing aid; and
11 the computer system transmits the parameters to the hearing aid to adjust the operations of the
12 hearing aid.

1 24. (new) The invention of claim 23, wherein the processor is in the telephone and the
2 telephone generates each test tone.

1 25. (new) The invention of claim 24, wherein the user enters each response via a key pad
2 on the telephone and the telephone transmits the user's responses to the computer system.

1 26. (new) The invention of claim 24, wherein the user enters each response via a keyboard
2 attached to the computer system.

1 27. (new) The invention of claim 24, wherein the computer system transmits the commands
2 to the processor in the telephone using DTMF signaling.

1 28. (new) The invention of claim 23, wherein the processor is in the hearing aid and the
2 hearing aid generates each test tone.

1 29. (new) The invention of claim 28, wherein the user enters each response via a key pad
2 on the telephone and the telephone transmits the user's responses to the computer system.

1 30. (new) The invention of claim 28, wherein the user enters each response via a keyboard
2 attached to the computer system.

1 31. (new) The invention of claim 23, wherein:
2 the computer system comprises a local computer co-located with the user; and
3 the local computer transmits the commands to the processor and receives the user's responses.

1 32. (new) The invention of claim 31, wherein the local computer generates and transmits
2 the parameters to the hearing aid.

1 33. (new) The invention of claim 31, wherein:
2 the computer system further comprises a remote computer located remotely from the user;
3 the local computer transmits the user's responses to the remote computer;
4 the remote computer generates and transmits the parameters to the local computer; and
5 the local computer transmits the parameters to the hearing aid.

1 34. (new) The invention of claim 33, wherein the remote computer transmits each
2 command to the local computer.

1 35. (new) The invention of claim 23, wherein:
2 the computer system comprises a remote computer located remotely from the user; and
3 the remote computer transmits the commands to the processor, receives the user's responses, and
4 generates and transmits the parameters to the hearing aid.

1 36. (new) A hearing aid for a user, the hearing aid comprising a processor adapted to:
2 receive a sequence of one or more non-audible commands from a computer system;
3 cause an audible test tone to be generated by the hearing aid in response to receipt of each
4 command, wherein:
5 the computer system receives a response to each of one or more of the test tones from the
6 user; and
7 the computer system processes the one or more responses from the user to generate
8 parameters for controlling operations of the hearing aid; and
9 receive the parameters from the computer system to adjust the operations of the hearing aid.

1 37. (new) The invention of claim 36, wherein the processor receives the command
2 sequence and the parameters directly from the computer system.

1 38. (new) The invention of claim 36, wherein the processor receives the command
2 sequence and the parameters from the computer system via a telephone.

1 39. (new) The invention of claim 38, wherein the command sequence and the parameters
2 are transmitted to the processor from the telephone using DTMF signaling.

1 40. (new) A telephone for adjusting operations of a hearing aid of a user, the telephone
2 comprising a processor adapted to:
3 receive a sequence of one or more non-audible commands from a computer system; and
4 cause an audible test tone to be generated by the telephone in response to receipt of each
5 command, wherein:
6 the computer system receives a response to each of one or more of the test tones from the
7 user; and
8 the computer system processes the one or more responses from the user to generate
9 parameters for controlling the operations of the hearing aid.

1 41. (new) The invention of claim 40, wherein the telephone is further adapted to receive
2 the parameters from the computer system and to transmit the parameters to the hearing aid to adjust the
3 operations of the hearing aid.

1 42. (new) The invention of claim 41, wherein the telephone is adapted to transmit the
2 parameters to the hearing aid using DTMF signaling.

1 43. (new) The invention of claim 40, wherein the telephone is further adapted to:
2 receive each response from the user via a key pad on the telephone; and
3 transmit the user's responses to the computer system.

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cont
1 44. (new) A computer system for adjusting operations of a hearing aid of a user, wherein
2 the computer system is adapted to:
3 transmit a sequence of one or more non-audible commands to a processor in one of a telephone
4 and the hearing aid, wherein the processor causes an audible test tone to be generated in response to
5 receipt of each command, wherein:
6 when the processor is in the telephone, the telephone generates each test tone; and
7 when the processor is in the hearing aid, the hearing aid generates each test tone;
8 receive a response to each of one or more of the test tones from the user;
9 process the one or more responses from the user to generate parameters for controlling the
10 operations of the hearing aid; and
11 transmit the parameters to the hearing aid to adjust the operations of the hearing aid.

1 45. (new) The invention of claim 44, wherein the processor is in the telephone and the
2 telephone generates each test tone.

1 46. (new) The invention of claim 45, wherein the user enters each response via a key pad
2 on the telephone and the computer system is adapted to receive the user's responses from the telephone.

1 47. (new) The invention of claim 45, wherein the computer system is adapted to receive
2 each response from the user via a keyboard attached to the computer system.

1 48. (new) The invention of claim 45, wherein the computer system is adapted to transmit
2 the commands to the processor in the telephone using DTMF signaling.

1 49. (new) The invention of claim 44, wherein the processor is in the hearing aid and the
2 hearing aid generates each test tone.

1 50. (new) The invention of claim 49, wherein the user enters each response via a key pad
2 on the telephone and the computer system is adapted to receive the user's responses from the telephone.

1 51. (new) The invention of claim 49, wherein the computer system is adapted to receive
2 each response from the user via a keyboard attached to the computer system.

1 52. (new) The invention of claim 44, wherein:
2 the computer system comprises a local computer co-located with the user; and
3 the local computer is adapted to transmit the commands to the processor and receive the user's
4 responses.

1 53. (new) The invention of claim 52, wherein the local computer is adapted to generate and
2 transmit the parameters to the hearing aid.

1 54. (new) The invention of claim 52, wherein:
2 the computer system further comprises a remote computer located remotely from the user;
3 the local computer is adapted to transmit the user's responses to the remote computer;
4 the remote computer is adapted to generate and transmit the parameters to the local computer;
5 and
6 the local computer is adapted to transmit the parameters to the hearing aid.

1 55. (new) The invention of claim 54, wherein the remote computer is adapted to transmit
2 each command to the local computer.

1 56. (new) The invention of claim 44, wherein:
2 the computer system comprises a remote computer located remotely from the user; and
3 the remote computer is adapted to transmit the commands to the processor, receive the user's
4 responses, and generate and transmit the parameters to the hearing aid.